

10/824,89999RE059A/ALBRP133USAAMENDMENTS TO THE SPECIFICATIONIn the Specification:

Please replace the paragraph beginning on page 5, line 13 and ending at page 5, line 19 with the following amended paragraph:

Another aspect of the present invention relates to a method for monitoring the condition of a pump driven by a motor. A first sample of current data signal relating to the operation of the pump is collected. The first sample of current data signal is input to a neural network. A second sample of current data signal relating to the operation of the pump is collected. The second sample of current data signal is input to the neural network, wherein any differences between the first signal and the second signal will be generated as a change in condition signal by the neural network.~~, any change of condition~~

Additionally, please replace the paragraph beginning on page 19, line 16 and ending on page 19, line 23 with the following amended paragraph:

It has been found that one-shot unsupervised ANN paradigms are more suitable for the development of condition monitoring system than supervised ANN paradigms. Furthermore, a monitoring system based on an unsupervised neural ~~network~~ network that can learn about the conditions of a process plant from a single pass of the training data, can provide a better solution for detecting new plant conditions. Supervised networks must be trained off line, and thus have a fixed set of variables and cannot give a valid output upon receipt of a new condition. A block diagram of a one such one-shot unsupervised ANN network known as the Adaptive Resonance Theory (ART) is shown in Fig. 9.